

1. Which instruction does unconditionally transfers the control of execution to a specified address?
2. Name some of the major architectures of the microprocessor and briefly explain how they differ.
3. The 8088/8086 microprocessor has been divided into a number of functional units. List them and explain the role each of them plays in the operation of the microprocessor.
4. Name all of the Pointer and Index registers and talk about the purpose each one of them serves.
5. How does the direction flag works?
6. Name three different Data Addressing Modes, giving an example for each.
7. State which of these instruction correct and which isn't, indicating why:

```
MOV CS, DS
POP 0234H
MOV AX, [1ARRAY]
INC BH, 01H
DEC {SI}
```

8. How does the Auxiliary Carry Flag and the Carry Flag differ from each other?
9. How many bytes does a Far Jump occupies on memory?
10. Is there a difference between the unconditional jump JS and the unconditional jump JL?
11. When do we benefit from the CALL instruction the most in the whole programming process?
12. List Four different Processor Control Instructions and briefly explain how they work.
13. The directive (.startup) is used at the beginning of a program. What is its purpose? And with what set of instructions can we substitute it?
14. How many pins does a 8088 microprocessor have?
15. Discuss the difference between INTR & NMI.
16. How many BUSES does a 8086 microprocessor have?
17. How many bus cycles does it take to perform the following instructions:

```
INC word ptr [DI]      (8088)
Add [001], AX          (8086)
```

17. Which instruction does unconditionally transfer the control of the execution?
18. How does a PUSH instruction affect the Stack Pointer?
19. During a comparison operation, where is the result of subtraction stored?
20. What is an example of an external interrupt?
21. What type of interrupt has the highest priority among all external interrupts?